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09/839,762	04/20/2001	Michael A. Lucarelli	96135CON2	2818

7590 03/08/2004  
Cabot Corporation  
Law Department  
157 Concord Road  
Billerica, MA 01821

EXAMINER
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RAJGURU, UMAKANT K

ART UNIT	PAPER NUMBER
1711	

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Please find below and/or attached an Office communication concerning this application or proceeding.



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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

~~Paper No. 999~~

Application Number: 09/839,762  
Filing Date: April 20, 2001  
Appellant(s): LUCARELLI ET AL.

Michelle B. Lando

For Appellant

EXAMINER'S ANSWER

**MAILED**  
MAR 05 2004  
**GROUP 1700**

This is in response to the brief filed on July 21, 2003.

**(1) *Real Party in Interest***

***A statement identifying the real party in interest is contained in the brief.***

**(2) *Related Appeals and Interferences***

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

This appeal involves claims 1-23.

**(4) *Status of Amendments After Final***

The appellants' statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 1-23 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

2311527 ; Oct. 1997 ; GB ; Nippon Paint Co ; C09D 5/00

2296915 ; July 1996 ; GB ; Degussa Aktiengesellschaft ; C09C 3/12

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2311527 in view of GB 2296915.

GB '527 discloses powder coating composition comprising particles of thermosetting resin and 0.05 to 2.0 parts by wt per 100 parts by wt of said resin, of finely divided hydrophobic silica powder having a number av. particle size of 3 to 10 nm (p.2, lines 15-23). Titanium dioxide and iron oxide are two other metal oxides suitable for incorporation into this composition (p.5, line 3). Silica powder has been surface treated (p.2, line 24 to p.3 line 2; p.6, line 21 to p.7 line 6). Since the disclosed particle size of silica is 3 to 10nm, it is reasonable to conclude that the said silica is a fumed silica.

GB '527 does not disclose (claimed) hexamethyldisilazane as the hydrophobing agent for treatment of metal oxide (instant claim 12).

GB 2296915 discloses surface-modified pyrogenically produced mixed oxides comprising SiO<sub>2</sub> and modified with one or more compounds that are listed in the abstract. One such class of compounds is silazanes (p.4, lines 11-15). In the process it is seen (p.6, lines 4-24) that water and ammonia are likely to be produced and that a part of ammonia remains attached to the metal oxide at its surface.

Therefore, it would have been obvious to use the silazanes of GB '915 as the modifying agent of choice in the composition of GB '527 with the expectation of achieving better flow and (thereby) coating having better performance.

**(11) Response to Argument**

Appellants state that "GB '527 discloses silica powder with a number average particle size from 3 to 10 nm. and that there is no disclosure of claimed mean agglomerate particles of less than about 25 microns". Examiner disagrees with the appellants for the following reasons.

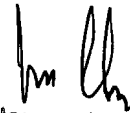
GB '527 discloses number average particle size of 3 to 10nm. Instant claim 1 encompasses a mean agglomerate particle size of less than 25 microns i.e. 25000 nm. It is known that particles adhere to one another to form aggregates, which combine to form agglomerates. Assuming for the sake of argument that 2500 particles of GB'527 adhere to one another by above process to form an agglomerate, and all particles of GB'527 are of 10nm size, still the agglomerate particles size will be 25000 nm. On the other hand if all particles of GB'527 are of 3nm, even if about 7500 such particles

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adhere to one another the agglomerate particle size will be at the most 25000 nm. In both instances, the particle size of GB'527 is seen to satisfy the (claimed) limitation of the agglomerate particle size. It is also to be noted that in GB'527, pages 2 &3, the surface of the finely divided silica powder has been surface-treated. It is therefore proper to infer that GB'527 suggests to use very fine segregated particles and thereby minimize the formation, if any, of agglomerates. It is reasonable to assume then that, if at all any agglomerates are formed in the coating composition of GB'527, there cannot be more than 2500 particles adhering together to form an agglomerate. Such an agglomerate therefore is going to be at the most 25000 nm in size. Therefore the silica powder of a number average particle size of 3 to 10 nm inherently satisfies the claimed limitation.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

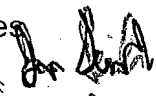


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U.K. Rajguru/lap  
January 23, 2004

Appeal Conferees

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